

# FACILITY COMPLIANCE AUDIT REPORT

# Division of Waste Management Solid Waste Section

<b>UNIT</b>	UNIT TYPE:													
Lined MSWLF		LCID		YW		Transfer		Compost		SLAS		COUNTY: Stokes		
Closed MSWLF		HHW		White goods		Incin		T&P		FIRM		PERMIT NO.: 85-03 (Closed)		
CDLF		Tire T&P / Collection		Tire Monofill		Industrial Landfill	X	DEMO		SDTF		FILE TYPE: COMPLIANCE		

Date of Audit: March 19, 2010 Date of Last Audit: March 25, 2009

#### **FACILITY NAME AND ADDRESS:**

Duke Energy Corporation Belews Creek Steam Station Pine Hall Road Ash Landfill (Closed) Pine Hall Road Belews Creek, NC 27009

**GPS COORDINATES**: N: 36.28420 E: -80.07012

# FACILITY CONTACT NAME AND PHONE NUMBER:

Melonie Martin, Environmental Coordinator w. 336-445-0610 c. 336-669-2994 f. 336-445-0423 mymartin@duke-energy.com

### **FACILITY CONTACT ADDRESS:**

Duke Energy Corporation Melonie Martin, Environmental Coordinator 3195 Pine Hall Road Belews Creek, NC 27009

### **AUDIT PARTICIPANTS**:

John Patrone, NCDENR – Solid Waste Section (SWS)
Randy Price, Duke Energy Corporation - Coal Equipment Owner
Melonie Martin, Duke Energy Corporation - Environmental Coordinator
Rick Hunsucker, Duke Energy Corporation - Plant Supervisor

#### **STATUS OF PERMIT:**

Permit To Operate (PTO) issued January 29, 2003 PTO scheduled expiration date January 29, 2008 Closure Plan Approval letter, issued by SWS, December 7, 2007 Proposed Changes - Closure Plan (approval) letter, issued by SWS, April 30, 2008

### **PURPOSE OF AUDIT**:

Post Closure Audit

#### **NOTICE OF VIOLATION(S):**

None

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You are hereby advised that, pursuant to N.C.G.S. 130A-22, an administrative penalty of up to \$15,000 per day may be assessed for each violation of the Solid Waste Statute or Regulations. For the violation(s) noted here, you may be subject to enforcement actions including penalties, injunction from operation of a solid waste management facility or a solid waste collection service and any such further relief as may be necessary to achieve compliance with the North Carolina Solid Waste Management Act and Rules.

#### STATUS OF PAST NOTED VIOLATION(S):

None

### **AREAS OF CONCERN AND COMMENTS:**

On March 19, 2010, John Patrone met with Randy Price, Melonie Martin, and Rick Hunsucker to conduct a post closure audit of the Duke Energy Corporation, Belews Creek Steam Station Pine Hall Road Ash Landfill (closed) in Belews Creek, Stokes County.

- 1. The Duke Energy Corporation, Belews Creek Steam Station Pine Hall Road Ash Landfill is no longer in operation. The landfill ceased accepting ash ~ February 2004.
- 2. The facility site plan and post closure requirements were discussed.
- 3. Native vegetation has taken-root atop the landfill cover. The grass provides uniform cover and is mowed annually.
- 4. Ash seeps-out of the right-rear corner of the landfill during heavy rain events. Mr. Price stated that (he believes) storm water is traveling across an area of the cap sloped too steep and pooling along the toe of the anchor trench (noticeable anchor trench deformity) then running along the inside of the liner and seeping-out at the right rear corner. Ash sediment and soil were observed at the area identified as the point of discharge. Ash sediment appears to travel into the adjacent erosion and sedimentation catch basin then along a channel into the Duke Energy Corporation, Belews Creek Steam Station's ash pond.
- 5. Mr. Price stated that the ash has seeped-out as a result of heavy rains for the past two months and that their contractor is actively assessing the problem. Mr. Patrone told Mr. Price and Ms. Martin to ensure that the problem is remediated ASAP and to contact Larry Frost (SWS Environmental Engineer). Also, please notify this office (Mr. Patrone) when remediation is complete.
- 6. Water monitoring wells were observed and accessible. The wells were locked, labeled, and contained a cement pad.
- 7. Semi-annual ground water monitoring records were discussed. Facility records were verified for ground water tests conducted on: 04/21&22/09 and 10/19&20/09. The following are in exceedance of semi-annual NCAC 2L groundwater standards for monitoring wells: arsenic, boron, cadmium, iron, manganese, nitrate (as nitrogen), selenium, sulfate, and total dissolved solids. Values for pH are below 6.5. The following are in exceedance of Appendix I compounds: 1,2 dichlorethane, benzene, cadmium, and selenium. The aforementioned results are similar for surface water analysis. The following are at or in exceedance of groundwater Solid Waste Section Limits (SWSL): arsenic, barium, chromium, copper, lead, mercury, nitrate (as nitrogen) selenium, zinc, and toluene. And the following Appendix 1 compounds are at or in exceedance of groundwater SWSL: antimony, beryllium, thallium, vanadium, and toluene.
- 8. Facility edge of waste markers were verified. The landfill constitutes 52.4 acres and contains 70 edge of waste markers. All edge of waste markers are placed at the interior boundary to the perimeter access roads.
- 9. The erosion and sedimentation control plan Certificate Of Plan Approval was verified for the Belews Creek Steam Station Pine Hall Road Ash Landfill Closure (Stoke-2008-012), approved 02/14/08.
- 10. The facility had proper signage.
- 11. The facility is secured by a locked gate.

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Please contact me if you have any questions or concerns regarding this audit report.

John Patrone

Environmental Senior Specialist

Regional Representative

Delivered on :March 26, 2010 by	Hand delivery	X	US Mail	Certified No. [_]

cc: Mark Poindexter, Field Operations Branch Supervisor

Jason Watkins, Central District Supervisor Donald Herndon, Compliance Officer Larry Frost, Environmental Engineer Ervin Lane, Compliance Hydrogeologist